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ABSTRACT

The Parsonian model of organization developed by Hills provided the foundation for studying the relationship between the structural effects of social structure and the perceived power of committees of a large university. This study was designed to examine through comparative field study the social values, organizational orientations, and social relations of six policy committees. Randomly selected faculty members indicated through paired comparisons the perceived power of the same committees. The multiple regression analyses results, while indicating no significant relationship exists between social structure and perceived power, revealed a significant relationship between the social values of committees and their perceived power. Best available copy. (Author)

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POWER AND SOCIAL STRUCTURE

IN HIGHER EDUCATION

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"Power and Social Structure in Higher Education"

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The concept of power is central to the understanding of organization structure and performance, and it has been apparent to the development of administrative theory and thought. Yet power has not been dealt with extensively in administrative literature. The studies that have been made have been primarily concerned with community power structures or with power inherent in specific roles.

Today's university presents a unique organizational structure. It seeks to bring together in one organizational pattern two distinct concepts of organization and administration: Bureaucracy and collegium. This organizational pattern results in divisions between the personnel of the university as they dedicate themselves to their professional interests and colleagues rather than to organizations and institutions. Demerath, Stephens, and Taylor contend that the key issue in this misunderstanding is not organizational structure and general tensions between administrations and professors. Instead the primary factors to be considered are the structures of power and decision-making which exist in an organization embodying a mixture of bureaucracy and collegium.[1]

A university is a social system in which the decision-making process is widely dispersed. Because of the collegial organization and the dual

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[1]N. J. Demerath, A. W. Stephens, and R.R. Taylor, Power, Presidents, and Professors (New York: Basic Books, Inc., 1967), p. 28.

system of professorial ranking, power cannot be tied to specific positions in the form of authority. To understand the universities' unique organizational structure, studies of power and its function in higher education are needed.

Statement of the Problem

The concern of this study was to make an investigation into the relationship of power and social structure of universities, specifically, the integrative bonds and structural effects of social structure. In Homan's book Social Behavior,[2] the foundations for understanding power are set forth in his theory of social exchange. Blau[3] took Homan's theory and used it as the basis for his theory of social structure in which he uses social exchange to explain and define the source of power and how it operates. Blau's research on the structural effects of social structure posits the suggestion that social values and norms, and interpersonal relationships are the bases for group differentiation in an organization.[4] These structural effects are the foundation of social associations from which social exchange and ultimately power develop.

Coupling Blau's structural effects of social structure with his theory of social exchange raises the question, what is the relationship between power and social structure? Can knowledge of group characteristics serve

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[2]G. C. Homans, Social Behavior (New York: Harcourt, Brace and World, Inc., 1961).

[3]P. M. Blau, Exchange and Power in Social Life (New York: John Wiley and Sons, Inc., 1964).

[4]P. M. Blau, "Structural Effects", American Sociological Review, Vol. 25, No. 2 (April, 1960), pp. 179-193.

The perceived power of the six committees was determined with the Survey of Committee Influence Instrument (SCI) sent to the randomly selected sample of one hundred-twenty faculty members. The instrument was developed by placing each of the six groups in a paired relationship to each other. The respondent underlined the most influential or powerful committee in each pair listed. This is known as a paired comparison technique.

Analysis of the Data

With the committee as the basic unit of analysis, a three-stage analysis of the data was necessitated. The first two stages were concerned with converting the data from individual to group scores and the group scores into statistically compatible measures for use in an analysis of relationships in the third stage.

The first stage of data analysis was concerned with aggregating the individual scores of committee members into a composite committee profile on all the variables. After a survey of the measures of profile similarity, the Cronbach and Gleser distance measure [D] was selected. This is a meaningful method of analysis of profile differences because it takes into consideration profile level, dispersion, and shape.

The second stage of data analysis involved translating the random sampling responses to the paired comparisons of the committees and councils to a quantitative measure. Thurstone's Scaling Technique was selected to provide a scale of measurement for the perceived power of committees. Thurstone's scaling provides an empirical frequency corresponding to the number of times the committee judged to be more powerful

than b, thereby providing the scale value of each committee's perceived power.

The final stage of analysis involved studying the relationships among committee characteristics and perceived power. The concern of the investigators was the relative and joint contribution of each variable to the prediction of the perceived power of committees. Methodologically, this implies a study of the relationship between the three variables of structural effects of social structure and the perceived power variable. Multiple regression analysis allowed for the comparison of multiple independent variables associated with structural effects and the dependent power variable. Multiple regression is used as a heuristic device in that the sample size may preclude generalizations of results.

This technique produced a correlation matrix which allowed for interpretation of the relationship between each predictor variable with the criterion variable as well as between the combined predictor variables and the criterion variable.

T-tests were used to determine the significance of the relationship between each individual predictor variable and the criterion variable. The significance of the relationship between the combined predictor variables and the criterion variable was discovered through the uses of the F ratio.

Findings

The administration of the Survey of Committee Influence instruments identified the perceived power ratings for each of the six committees in this investigation. The SCI instrument was administered to each [illegible]

sampling of the faculty and to the forty-one committee members interviewed. There is a high degree of concurrence in the rank order of the perceived power of the six committees as indicated by the random sample and by the committee members (Tables I and II). This similiarity of rank ordering and of relational strength of the perceived power suggests that the power of committees is viewed in a corresponding manner by both groups. The results from the two samples would imply that the reputational paired comparisons technique provides a valid means for determining power perceptions in a social system.

Correlational analyses were used to investigate the relationships among social structure characteristics and perceived power. The correlation matrix provided intercorrelations between the independent and the independent-dependent variables. In testing the hypotheses, the correlational techniques were used on both the primary data for perceived power, the random sample of the faculty, and the data from committee members. In each application, the committee characteristics data were identical and the only change was in the dependent or criterion variable (the scaled perceived power values). The analysis of the secondary data agreed with the conclusions reached as a result of the analysis of the primary sample (Tables III and IV).

The correlational matrix (Table III) presents the intercorrelations between the three structural effect variables and the correlation between each of these independent variables and the dependent variable, perceived power, for the random sample of the faculty. The multiple correlation coefficient for this matrix is 0.9215. This is the correlation between the perceived power variable and the weighted sum of the three structural

effects variables. Testing to determine if the combined variables were a significantly greater predictor of perceived power than the single best predictor produced an F ratio of 1.0019 which is less than the table value of 19.00 at the .01 level of confidence with 2/2 degrees of freedom. The multiple correlation coefficient for the secondary data source (Table IV), interviewed committee members, revealed an even lower correlation between these variables.

The basic hypothesis is rejected. No significant correlation was identified between structural effects of social structure, i.e., social values, organizational orientations, and interpersonal relationships, and the perceived power of committees of a large university. The results indicated that the optimally combined variables are no greater predictor of perceived power than the single best predictor. Therefore, multiple regression gives no increased prediction of perceived power over and above the prediction from the best single preditor, social values.

Correlations were computed between each of the independent variables, social values, organizational orientations, and interpersonal relationships, and the scaled perceived power values. No significant correlation was found between organization orientations and perceived power, and interpersonal relationships and perceived power.

In only one case was the original conjectural statement supported. Significant correlation was identified between social values and perceived power for university committees and the correlation was positive.

Although the theory and definitions of the variables led the investigators to expect a significant relationship, the positive direction of the

correlation is a surprise. When using D in a correlational analysis, the direction of the correlation determines the interpretation. A positive correlation suggests that discrepancy is a work while a negative correlation indicates that congruency is affecting the outcome. The results suggest that the greater the social value discrepancy of a committee, the greater its perceived power.

Conclusions

The impetus which gave rise to this study was the apparent lack of understanding of structures of power and decision-making in universities and colleges in the face of growing emphasis and pressures for greater faculty participation in governance. A review of the literature led the investigators to believe that there are researchable relationships between structural effects or characteristics of the various groups of a social system and their perceived power in the system. The conclusions derived from this investigation are multifaceted and provide many implications for continued research of the basic variables, structural effects of social structures and perceived power.

The literature promulgating greater faculty participation in university decision-making bases its conclusions upon personal opinions rather than emperical data. The general impression presented is that it is impossible to do empirical studies in a university. The data presented indicates a positive response to this investigation. The implication is that empirical studies can be conducted in institutions of higher education if adequate preparation is made and the faculty is made aware of the value of the study for them and their institution.

Implications

Left unanswered is the question of what makes for differences between powerful and powerless groups in an organization. The general lack of support for the hypotheses built upon the theoretical constructs presented raises several concerns. The questions and implications stimulated by this condition are many:

- Do the SOV, ORI, and IRS, measure the committee values, orientations, and social interactions?
- Does the SCI measure the power of the group being tested?

Seemingly each of these instruments is measuring what it is designed to measure. Yet, the fact remains, the results do not support the hypotheses. Social theory and its application to social systems provided the means for identifying the domains in this study. The question arising from this discrepancy is:

- If the methodological approach is measuring these domains, why the variations from the anticipated results?

The most plausible explanation because of the firm grounding in theoretical constructs is that there is extraneous variance that needs to be considered and controlled in the methodological application.

In seeking an explanation for some fof the discrepancy between the results and the hypotheses, one factor to be considered is the size of the sample. The analytical technique used was administered to only six cases which would generally preclude any generalizations concerning the results. However, correlation analyses take into account the size of the sample. Furthermore, the positive direction and the relative strength of all the correlations of the study do not indicate that the addition of more committees

and councils to the sample would significantly alter the result. This implies that the sample size is not the cause for discrepancy and that other facets of the methodological application need to be considered.

The results of the study do suggest several adjustments that should be considered prior to conducting further research. One area of concern to the investigator is control for role definition. Indications were that the power ratings were affected by the role perception of the respondent for each committee and council in the sample. Therefore, the scaled perceived power values are in reality a combination of defined or role imposed influence and group-effected (personal) influence or power. Consideration of the role and function of the committees and councils must be taken into account and the effect of this role definition upon actions and influence separated from the measurement of power which affects policy, decision-making processes of a university.

A second concern relative to the measurement of power is perspective. While the SCI measured the power of the six committees and councils in relation to each other, it raises a question as to their power in relation to the entire university and all of its power structures. The power index of the six committees and councils does not indicate the degree of power which they have in the university. The study did not seek to determine or define the power structure of the university. It is the impression of this investigator that this failure to determine the relationship of the six committees and councils to the university's power structure may be a part of the explanation as to why the hypotheses were not supported.

A concern in future research would be whether or not the expected congruence of values and orientations, and cohesiveness of social interaction may be found in groups manifesting greater power in the institution than those examined in this study. A further implication would be that the study of power in a formal organization must involve a systems approach and the utilization of systems analysis. The study of power apparently cannot be examined in a fragmentary manner with much success. Further research is required to examine the relationship between the structure of power in an institution and the relative strength of any given unit. This would then provide perspective to the structural effects values obtained. The implications are innumerable: where is the locus of decision-making in a university? What is the relation between formal power or authority and committee action? What relation exists between informal committees and informal activities and influences, and the formal power structure?

One further consideration is in order regarding the implications of the study. The university does not function completely as a classical bureaucracy in the Weberian sense though it is quite bureaucratic, or a professional association though it is composed of a large number of professional groups. Its constituencies and its size preclude the possibility of categorizing it as being completely one or the other. It is a mixture of both and its size gives to it many of the characteristics of a community. The problems of the university are basically social in nature

which must be resolved through political action.[9] While power is developed primarily through social processes, in order to determine who decides what and how, it may well be that a political interpretation will have to be used in place of the formalized bureaucratic analysis. A political decision model would add a new dimension to the areas already mentioned. It would bring into examination the political pressures exerted on the authorities of the university by partisan-interest group pressures and their continuing political process after a policy has been established.[10]

The thrust of this study has been to develop a theoretical framework for the examination of power and to conduct empirical research of power. This has necessitated that the study be primarily heuristic in its scope and development. The implications for further research are multitudinous and each implication mentioned has suggested further implications for new and/or extended research.

The study has left unanswered the question as to what differentiates between powerful and powerless groups. Indications are that the design used did measure perceived power and the structural effects of specific social structures, i.e., policy councils and standing committees of the university. A further conclusion is that power in complex organizations can not be fruitfully studied in a fragmentary of sub-system manner. Instead such

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[9]G.W. Baughman, "Evaluating the Performance and Effectiveness of University Management Information Systems" in J. Minter and B. Lawrence, ed., Management Information Systems: Their Development and Use in the Administration of Higher Education (Boulder, Colorado: Western Interstate Commision for Higher Education, 1969), p. 2.

[10]I. V. Baldridge, op. cit. pp. 192-193.

studies must take a systems approach. Additional research is needed to determine the dimensions of power and structural effects of social structure in a social system. It is hoped that this investigation will generate additional research that will contribute to our understanding of these domains.

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TABLE I

PERCEIVED POWER CLASSIFICATION
OF SIX COMMITTEES AND COUNCILS
BY FACULTY RANDOM SAMPLE

Committee	Scaled Perceived Power
Budget Council	1.479
Council on Planning and Development	.594
Council on Instruction	.566
Committee on Academic Regulations	.206
Council on Faculty Personnel	.179
University Oversight and Evaluation Committee on Administrative Structure	.000

TABLE II

PERCEIVED POWER CLASSIFICATION
OF SIX COMMITTEES AND COUNCILS
BY INTERVIEWED COMMITTEE MEMBERS

Committee	Scaled Perceived Power
Budget Council	1.731
Council on Planning and Development	1.012
Council on Instruction	1.054
Committee on Academic Regulations	.068
Council on Faculty Personnel	.251
University Oversight and Evaluation Committee on Administrative Structure	.000

CORRELATIONS BETWEEN PERCEIVED POWER
AND STRUCTURAL EFFECTS OF SOCIAL STRUCTURE

(RANDOM SAMPLE OF FACULTY)

	Social Values	Organizational Orientations	Interpersonal Relationships	Perceived Power
Social Values	1.000	0.7785	0.0977	0.8354
Organizational Orientations	0.7785	1.0000	0.1234	0.5539
Interpersonal Relationships	0.0977	0.1234	1.0000	0.4247
Perceived Power	0.8354	0.5539	0.4247	1.0000

All r's $>$ .7200 are significant at the $p < .05$.

Multiple regression correlation coefficient = 0.9215

F ratio = 1.0019

F value $>$ 19.00 are significant at the $p < .05$ (d.f.-2/2).

TABLE IV

CORRELATIONS BETWEEN PERCEIVED POWER AND STRUCTURAL EFFECTS OF SOCIAL STRUCTURE

(INTERVIEWED SUBMITTED MEMBERS)

	Social Values	Organizational Orientations	Interpersonal Relationships	Perceived Power
Social Values	1.0000	0.7785	0.0977	0.7852
Organizational Orientations	0.7785	1.0000	0.1234	0.6343
Interpersonal Relationships	0.0977	0.1234	1.0000	0.3060
Perceived Power	0.7852	0.6343	0.3060	1.0000

All r's $\geq$ .7290 are significant at the $p \leq .05$.

Multiple regression correlation coefficient = 0.8145

F ratio = 0.1018

F value $\geq$ 19.00 are significant at the $p \leq .05$ (d.f.-2/2).

FIGURE I

PARSONIAN MODEL OF ORGANIZATIONS*

Imperative Functions of Social Systems

	Continuity and Stability Over Time INSTRUMENTAL	Immediate Gratification CONSUMMATORY
Relation to Environment EXTERNAL	Adaptation Continuity and stability over time in relation to environment.	Goal-Attainment Gratification in relation to environment.
Co-existence of units INTERNAL	Pattern-Maintenance Continuity and stability over time in relations among units.	Integration Gratification in relations among units.

*R. J. Hills, Toward a Science of Organization (Eugene, Oregon: University of Oregon Press, 1968), p. 21.